Cutaneous melanoma: learning to see

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Case 1

A 75-year-old woman was seen because of a 10to 15-year history of a light brown lesion on her left forearm (figure 1). In the previous few weeks, areas within this lesion had become darker and thicker, with associated bleeding. She had seen the same internist twice a year to monitor her hypertension and type 2 diabetes mellitus. Her medical history was significant for a cerebrovascular accident 20 years ago, resulting in left hemiparesis. A total-body skin examination was performed, and a large pigmented lesion was located on the left forearm. Under normal illumination, 2 primary areas were involved. The distal lesion measured 4 cm in diameter and was black, gray, pink, and brown with irregular borders. Proximally, there was a prominent 2.5-cm multilobulated blue-black plaque within a 5-cm plague. Background pigmentation encompassed both areas and measured 10.5 cm.

Case 2

A 78-year-old man who had a history of a basal cell carcinoma resected from the right chest was seen because of a pigmented lesion on the posterior right auricle that had been present for about 4 years (figure 2). He had shown the lesion to his internist during an evaluation for a bicycle injury 2½ years previously and was told not to worry. On total-body skin examination, the right posterior auricle showed a pigmented plaque 1.5 cm in diameter with irregular borders, both flat and raised surfaces within the lesion, and an array of medium brown, dark brown, and black pigmentation.

QUESTIONS

What is the most likely diagnosis? What should you do if a patient presents to your office with a lesion similar to that in either case 1 or case 2?

DISCUSSION

The diagnosis from biopsy specimens of the pigmented lesions from both patients was cutaneous melanoma. The specimen from case 1 exhibited histologic features suggestive of superficial spreading melanoma whereas that in case 2 was consistent with spindle cell desmoplastic melanoma. The melanoma in both cases was Clark's level 5 (graded 1-5, with 5 being the most severe) with perineural invasion. The patients in both cases were previously reassured by their primary care physicians, who observed the lesions for about 9 years and $2\frac{1}{2}$ years, respectively.

These cases are presented because they illustrate several important and life-saving issues. A recent study showed that an increased supply of general internists is associated with reduced odds of early detection of melanoma.¹ The same study found that family practitioners and dermatologists did better in diagnosing cutaneous malignancies. We in the medical community need to do a better job of training all physicians and educating patients to recognize the signs of a suspicious lesion. It is critical that primary care physicians learn to recognize the ABCDs—Asymmetry, Border irregularity, Color variegation, and Diameter ≥6 mm—of a melanoma.² Perhaps more important, one of the most significant features signaling possible malignant melanoma is change: the major features



Figure 1 Lesion on left arm in patient 1 that had 2 primary areas of involvement within an area of background pigmentation that was 10.5 cm in diameter. The distal lesion measured 4 cm. Proximally, the patient had a prominent 2.5-cm multilobulated plaque within a 5-cm plaque.



Figure 2 A 1.5-cm lesion with an asymmetric scalloped border and brown and black pigmentation on the right posterior auricle in patient 2

include change in size, shape, or color and the minor ones are inflammation, crusting, bleeding, or sensory change.³ A changing lesion or one with ABCDs should *not* just be observed. It is imperative to either or both obtain a biopsy specimen and request an urgent referral to a dermatologist for further evaluation and management. In addition, having a higher index of suspicion of malignancy in patients who have had a nonmelanoma skin cancer such as basal cell carcinoma (as in case 2) is prudent because the incidence of nonmelanoma skin cancer is higher in patients who have melanoma.⁴

These 2 cases are impressive but were overlooked by the patients, their families, and their competent, welltrained internists. A few reasons for this can be conjectured. Some patients and physicians may think that skin lesions are purely cosmetic, and they fail to appreciate that such lesions may be life-threatening. Alternatively, even impressive tumors can be overlooked in the face of other medical problems; the patient in case 1 had a stroke, hypertension, and diabetes mellitus, and the patient in case 2 had a serious neck injury due to a bicycle trauma. The locations and lack of visibility of the lesions were also significant when analyzing why these melanomas were allowed to grow to such large sizes. The lesion in case 1 appeared on the arm that was paralyzed after the patient's cerebrovascular accident, so she and her physician were more likely to ignore that arm because it was not functional. In addition, the patient wore long-sleeved shirts that covered the melanoma. The patient in case 2 could ignore his lesion because it was hidden from view on the posterior auricle.

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